

IN THE CLAIMS:

The following is a complete listing of the claims in this application, reflects all changes currently being made to the claims, and replaces all earlier versions and all earlier listings of the claims:

Claim 1. (Currently Amended) A method of processing a digital signal identified by a unique identifier in a distributed communication network composed of several communication apparatuses, comprising the steps of:

- storing at least a part of the data constituting the identified digital signal in a local storage located in one of the apparatuses; and
- managing two descriptors related to the unique identifier within the local storage, including a first descriptor which provides a description representing the structure and the organization of the data constituting the identified digital signal and a second descriptor which is dependent on the first descriptor and representative of the part of the data stored in the local storage.

Claim 2. (Original) A method according to claim 1, further comprising a step of updating the second descriptor as a function of the data representative of the identified digital signal received and stored in the local storage.

Claim 3. (Original) A method according to claim 1, further comprising a step of sending from a server apparatus, a notification of availability of the identified signal to at least

one client apparatus in the communication network, including the first descriptor of the identified signal.

Claim 4. (Previously Presented) A method according to claim 3, further comprising steps, performed by a server apparatus in the communication network, of:

- receiving from a client apparatus a request containing the unique identifier; and
- sending to the client apparatus the second descriptor related to the unique identifier and representative of the data relative to the identified signal stored in the local storage, if the unique identifier is known by the server apparatus.

Claim 5. (Previously Presented) A method according to claim 1, further comprising steps, performed by a server apparatus in the communication network, of:

- receiving from a client apparatus a request containing the unique identifier; and
- sending to the client apparatus the second descriptor related to the unique identifier and representative of the data relative to the identified signal stored in the local storage, if the unique identifier is known by the server apparatus.

Claim 6. (Previously Presented) A method according to claim 5, further comprising steps, performed by a server apparatus in the communication network, of:

- receiving from a client apparatus one request of data relative to the

identified signal;

- retrieving in the local storage at least part of the requested data; and
- sending to the client apparatus the at least part of the requested data.

Claim 7. (Previously Presented) A method according to claim 2, further comprising steps, performed by a server apparatus in the communication network, of:

- receiving from a communication apparatus one request of data relative to the identified signal and one second descriptor representative of the data which is locally present on the client apparatus at the origin of the request;
- retrieving in the local storage at least part of the requested data;
- sending to the client apparatus at the origin of the request the at least part of the requested data; and
- updating the second descriptor as a function of the at least part of the requested data which has been sent.

Claim 8. (Previously Presented) A method according to claim 7, further comprising a step, performed by a server apparatus in the communication network, of sending to another server apparatus the updated second descriptor and the request of data which has been modified to take into account the at least part of the requested data which has been previously sent by the server apparatus.

Claim 9. (Original) A method according to claim 1, further comprising steps,

performed by a client apparatus in the communication network prior to said storing step, of:

- receiving the first descriptor representative of the identified digital signal; and
- storing the first descriptor in the local storage.

Claim 10. (Original) A method according to claim 9, further comprising a step, performed by a client apparatus in the communication network, of receiving a notification of availability of the data relative to the unique identifier.

Claim 11. (Previously Presented) A method according to claim 9, further comprising a step, performed by a client apparatus in the communication network, of sending to at least one server apparatus at least one request containing the unique identifier.

Claim 12. (Original) A method according to claim 11, further comprising steps, performed by a client apparatus in the communication network for retrieving at least a part of the digital signal, of:

- receiving at least one second descriptor representative of the data locally present on at least one server; and
- issuing at least one request of data, directed to said at least one server, as a function of the first descriptor and the at least one second descriptor.

Claim 13. (Original) A method according to claim 12, further comprising a step, performed by a client apparatus in the communication network, of receiving from at least one server at least part of the data constituting the identified signal and which has been specified in the previously sent request of data.

Claim 14. (Original) A method according to claim 9, further comprising a step, performed by a client apparatus in the communication network, of sending to at least one server at least one request of data as a function of the received first descriptor, and the second descriptor representative of the data locally present on the client apparatus.

Claim 15. (Original) A method according to claim 1, wherein the digital signal is in multiresolution format.

Claim 16. (Original) A method according to claim 15, wherein the first descriptor is representative of all available resolutions and their representation units (precincts) in a compressed format.

Claim 17. (Original) A method according to claim 16, wherein the second descriptor is representative of the units of the compressed format (precincts) as referenced in the first descriptor.

Claim 18. (Original) A method according to claim 15, wherein the second

descriptor has a hierarchical structure.

Claim 19. (Currently Amended) A device for processing a digital signal, identified by a unique identifier in a distributed communication network composed of several communication apparatuses, comprising:

- means of storing at least a part of the data constituting the identified digital signal in a local storage located in one of the apparatuses; and
- means of managing two descriptors related to the unique identifier within the local storage, including a first descriptor which provides a description representing the structure and the organization of the data constituting the identified digital signal and a second descriptor which is dependent on the first descriptor and representative of the part of the data stored in the local storage.

Claim 20. (Original) A device according to claim 19, further comprising means of updating the second descriptor as a function of the data representative of the identified digital signal received and stored in the local storage.

Claim 21. (Original) A device according to claim 19, further comprising means of sending from a server apparatus, a notification of availability of the identified signal to at least one client apparatus in the communication network, including the first descriptor of the identified signal.

Claim 22. (Previously Presented) A device according to claim 21, further comprising, in a server apparatus in the communication network:

- means of receiving from a client apparatus a request containing the unique identifier; and
- means of sending to the client apparatus the second descriptor related to the unique identifier and representative of the data relative to the identified signal stored in the local storage, if the unique identifier is known by said server apparatus.

Claim 23. (Previously Presented) A device according to claim 19, further comprising, in a server apparatus in the communication network:

- means of receiving from a client apparatus a request containing the unique identifier; and
- means of sending to the client apparatus the second descriptor related to the unique identifier and representative of the data relative to the identified signal stored in the local storage, if the unique identifier is known by said server apparatus.

Claim 24. (Previously Presented) A device according to claim 23, further comprising, in a server apparatus in the communication network:

- means of receiving from a client apparatus one request of data relative to the identified signal;
- means of retrieving in the local storage at least part of the requested data; and

- means of sending to the client apparatus the at least part of the requested data.

Claim 25. (Previously Presented) A device according to claim 20, further comprising, in a server apparatus in the communication network:

- means of receiving from a communication apparatus one request of data relative to the identified signal and one second descriptor representative of the data which is locally present on a client apparatus at the origin of the request;

- means of retrieving in the local storage at least part of the requested data;

- means of sending to the client apparatus at the origin of the request the at least part of the requested data; and

- means of updating the second descriptor as a function of the at least part of the requested data which has been sent.

Claim 26. (Original) A device according to claim 25, further comprising, in a server apparatus in the communication network, means of sending to another server apparatus the updated second descriptor and the request of data which has been modified to take into account the at least part of requested data which has been previously sent by said server apparatus.

Claim 27. (Original) A device according to claim 19, further comprising, in a client apparatus in the communication network:



- means of receiving the first descriptor representative of the identified digital signal; and
- means of storing the first descriptor in the local storage.

Claim 28. (Original) A device according to claim 27, further comprising, in a client apparatus in the communication network, means of receiving a notification of availability of the data relative to the unique identifier.

Claim 29. (Previously Presented) A device according to claim 27, further comprising, in a client apparatus in the communication network, means of sending to at least one server apparatus at least one request containing the unique identifier.

Claim 30. (Original) A device according to claim 29, further comprising, in a client apparatus in the communication network for retrieving at least a part of the digital signal:

- means of receiving at least one second descriptor representative of the data locally present on at least one server; and
- means of issuing at least one request of data, directed to said at least one server, as a function of the first descriptor and the at least one second descriptor.

Claim 31. (Original) A device according to claim 30, further comprising, in a client apparatus in the communication network, means of receiving from at least one server at least part of the data constituting the identified signal and which has been specified in the

previously sent request of data.

Claim 32. (Original) A device according to claim 27, further comprising, in a client apparatus in the communication network, means of sending to at least one server at least one request of data as a function of the received first descriptor, and the second descriptor representative of the data locally present on the client apparatus.

Claim 33. (Original) A device according to claim 19, wherein the digital signal is in multiresolution format.

Claim 34. (Original) A device according to claim 33, wherein the first descriptor is representative of all available resolutions and their representation units (precincts) in a compressed format.

Claim 35. (Original) A device according to claim 34, wherein the second descriptor is representative of the units of the compressed format (precincts) as referenced in the first descriptor.

Claim 36. (Original) A device according to claim 33, wherein the second descriptor has a hierarchical structure.

Claim 37. (Original) A communication apparatus comprising a device

according to claim 19.

Claim 38. (Original) An information storage means which can be read by a computer or a microprocessor containing code instructions of a computer program for executing the steps of the method according to claim 1.

Claim 39. (Original) A partially or totally removable information storage means which can be read by a computer or a microprocessor containing code instructions of a computer program for executing the steps of the method according to claim 1.

Claim 40. (Original) A computer program loadable onto a programmable apparatus, comprising sequences of instructions or portions of software code for implementing the steps of the method according to claim 1, when said computer program is loaded and executed by the programmable apparatus.